Caltrans
Maintenance
June 20, 1998
Vol. 1/Issue 5
STORM WATER POLLUTION PREVENTION BULLETIN

Protection of water quality in receiving waters is one of the environmental objectives of Caltrans maintenance operations. This objective is accomplished by implementing Best Management Practices (BMPs) that have been developed to reduce or eliminate the release of sediments and pollutants into receiving waters. This bulletin discusses the common vehicle and equipment washing practices conducted at maintenance facilities and implementation of appropriate BMPs. Typical washing operations include:

Pre-Wash: Low pressure rinsing with water to remove mud and debris from the vehicle tires, truck beds and sweepers.

Exterior Rinsing: Rinsing of vehicles and windshields with water to remove dust and particulates.

Pressure Washing: Washing of vehicles and equipment with a hydraulic pressure washer, with or without detergent. This includes engine and under-carriage washing.

BMP Goals

The goals of the vehicle and equipment washing BMPs are: sediment control; prevention of solvents, oil and grease from entering the storm drain system or watercourses; and promotion of water conservation and recycling.

General Precautions

- Use positive shutoff valves to minimize water usage.
- Keep the washing area clean. Regularly inspect and maintain the area wash pads, clarifiers, oil-water separators, sumps and sediment traps.
- Educate employees and subcontractors on proper use of the washing area.
- Post appropriate signs at each washing facility that does not discharge to a sanitary sewer or recycling system. For example:

Recommended practices

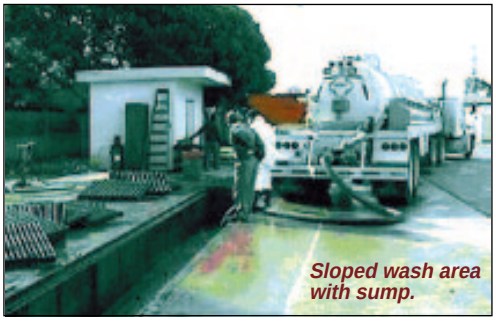
Where possible all wash water should be discharged into a sanitary sewer, a recycling system or a dead-end sump.

In cases where drainage to a recycling system or sanitary sewer is not feasible and wash water needs to be discharged into a storm drain, ***then*** BMPs must be used to reduce or eliminate sediment flow into the storm drain system.

Pre-Wash and Rinsing Operations

Pre-wash and rinsing operations may discharge to a storm drain **if** the following BMPs are implemented.

- Pre-wash or rinse vehicles only to remove accumulated sediment. Prohibit the use of detergents or pressure washing of engines or undercarriages.
- Do not use solvents to clean vehicles at any time.
- Provide a designated paved area away from hazardous material or waste storage areas to prevent potential contamination of overspray or runoff.
- If possible, berm or slope the area to prevent run-on and run-off of wash water on to the yard and direct drainage to a sump to allow sediments to settle prior to discharge.


Sloped wash area with sump.

- If space permits, make the area large enough to accommodate bigger vehicles such as sweepers and truck beds.
- If a sump cannot be provided, use a sediment trap such as straw bales, gravel bags or A.C. berms that will allow sediment and debris to settle prior to water discharge.
- Make sure that rinse water does not drain across the facility where it can pick up oil and debris prior to discharge

Pressure Washing Operations

Wash water from **pressure or detergent washing** operations can contain residual oil and grease. For these types of washing operations the following BMPs apply:

- Use an approved wash rack that is sloped to contain and drain wash water and constructed to prevent run-on and run-off.
- Use phosphate-free, biodegradable detergents when available.
- Discharge wash water to a sanitary sewer, a dead-end sump, or a recycling system.
- Collect water and sediment from sumps and dispose of properly.
- Comply with local agency pre-treatment and monitoring requirements for wash water discharged to the sanitary sewer and install oil-water separators, rain sensors or canopies when required.

This bulletin is published monthly by the Storm Water Compliance Review Task Force to support the Caltrans maintenance staff in its efforts to achieve and maintain compliance with storm water pollution prevention regulatory requirements.

Storm Water Management Practices for Vehicle and Equipment Washing

Additional information is available in the Caltrans Maintenance Manual, Chapter C-6, or from your District Maintenance Storm Water Coordinator. Questions or comments may be directed to Jack Broadbent, Maintenance Storm Water Coordinator, (916) 653-036